Dkt. 2271/65289

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of : Yoshiyuki SASAKI

Serial No. : Not Yet Assigned Group Art Unit:

Date Filed : Concurrently Herewith Examiner:

For : INFORMATION REPRODUCING METHOD AND APPARATUS

1185 Avenue of the Americas
New York, N.Y. 10036

Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Prior to examination on the merits, please amend the above-identified application as follows:

In the Claims:

Please amend claims 5-7, 9, 14-16 and 18 as follows:

5. (Amended) The information reproducing method as claimed in Claim 2, further comprising the steps of:

monitoring whether the read request is issued; and

restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

6. (Amended) The information reproducing method as claimed in Claim 2, further comprising the steps of:

monitoring a read address of the read request; and

restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

7. (Amended) The information reproducing method as claimed in Claim 2, further comprising the steps of:

determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

9. (Amended) The information reproducing method as claimed in Claim 2, further comprising the steps of:

temporarily storing information read from the information medium in a cache memory;

pre-reading information if a space is available in the cache memory; and

causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

14. (Amended) The information reproducing apparatus as claimed in Claim 11, further comprising:

a monitoring part monitoring whether the read request is issued; and

a restarting part restarting measurement of the average transfer rate if the read request is

not issued for a predetermined time in measurement of the average transfer rate.

15. (Amended) The information reproducing apparatus as claimed in Claim 11, further comprising:

a monitoring part monitoring a read address of the read request; and

a restarting part restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

16. (Amended) The information reproducing apparatus as claimed in Claim 11, further comprising:

a determining part determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

a validating part validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

18. (Amended) The information reproducing apparatus as claimed in Claim 11, further comprising:

a storing part temporarily storing information read from the information medium in a cache memory;

a pre-reading part pre-reading information if a space is available in the cache memory; and

a part causing measurement of the average transfer rate to be initiated when the cache

memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

Please add claims 19-35 as follows:

19. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

monitoring whether the read request is issued; and

restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

20. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

monitoring a read address of the read request; and

restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

21. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

22. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

temporarily storing information read from the information medium in a cache memory;

pre-reading information if a space is available in the cache memory; and

causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

23. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

monitoring whether the read request is issued; and

restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

24. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

monitoring a read address of the read request; and

restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

25. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

26. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

temporarily storing information read from the information medium in a cache memory;

pre-reading information if a space is available in the cache memory; and

causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

27. (New) The information reproducing apparatus as claimed in Claim 12, further comprising:

a monitoring part monitoring whether the read request is issued; and

a restarting part restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

28. (New) The information reproducing apparatus as claimed in Claim 12, further comprising:

a monitoring part monitoring a read address of the read request; and

a restarting part restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

29. (New) The information reproducing apparatus as claimed in Claim 12, further comprising:

a determining part determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

a validating part validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

30. (New) The information reproducing apparatus as claimed in Claim 12, further comprising:

a storing part temporarily storing information read from the information medium in a cache memory;

a pre-reading part pre-reading information if a space is available in the cache memory; and

a part causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

31. (New) The information reproducing apparatus as claimed in Claim 13, further comprising:

and

a part causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

35. (New) The information reproducing apparatus as claimed in Claim 14, further comprising:

a storing part temporarily storing information read from the information medium in a cache memory;

a pre-reading part pre-reading information if a space is available in the cache memory; and

a part causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

REMARKS

Claims 5-7, 9, 14-16 and 18 have been amended to correct their dependencies and claims 19-35 have been added. Claims 1-35 are in the case, with claims 1-4 and 10-13 being in independent form.

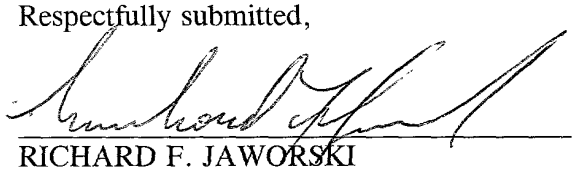
The Office is hereby authorized to charge any additional fees which may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Entry of this amendment and allowance of this application are respectfully requested.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES IN THE CLAIMS

5. (Amended) The information reproducing method as claimed in [any of claims 2 to 4] Claim 2, further comprising the steps of:

monitoring whether the read request is issued; and

restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

6. (Amended) The information reproducing method as claimed in [any of claims 2 to 4] Claim 2, further comprising the steps of:

monitoring a read address of the read request; and

restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

7. (Amended) The information reproducing method as claimed in [any of claims 2 to 4] Claim 2, further comprising the steps of:

determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

9. (Amended) The information reproducing method as claimed in [any of claims 2 through 4] Claim 2, further comprising the steps of:

temporarily storing information read from the information medium in a cache memory;

pre-reading information if a space is available in the cache memory; and

causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

14. (Amended) The information reproducing apparatus as claimed in [any of claims 11 through 13] Claim 11, further comprising:

a monitoring part monitoring whether the read request is issued; and

a restarting part restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

15. (Amended) The information reproducing apparatus as claimed in [any of claims 11 through 13] Claim 11, further comprising:

a monitoring part monitoring a read address of the read request; and

a restarting part restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

16. (Amended) The information reproducing apparatus as claimed in [any of claims 11 to 13] Claim 11, further comprising:

a determining part determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

a validating part validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

18. (Amended) The information reproducing apparatus as claimed in [any of claims 11 to 14] Claim 11, further comprising:

a storing part temporarily storing information read from the information medium in a cache memory;

a pre-reading part pre-reading information if a space is available in the cache memory; and

a part causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

Please add claims 19-35 as follows:

19. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

monitoring whether the read request is issued; and

restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

20. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

monitoring a read address of the read request; and

restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

21. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

22. (New) The information reproducing method as claimed in Claim 3, further comprising the steps of:

temporarily storing information read from the information medium in a cache memory;

pre-reading information if a space is available in the cache memory; and

causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

23. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

monitoring whether the read request is issued; and

restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

24. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

monitoring a read address of the read request; and

restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

25. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

26. (New) The information reproducing method as claimed in Claim 4, further comprising the steps of:

temporarily storing information read from the information medium in a cache memory;

pre-reading information if a space is available in the cache memory; and

causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read

from the information medium at a maximum rate.

27. (New) The information reproducing apparatus as claimed in Claim 12, further comprising:

a monitoring part monitoring whether the read request is issued; and

a restarting part restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

28. (New) The information reproducing apparatus as claimed in Claim 12, further comprising:

a monitoring part monitoring a read address of the read request; and

a restarting part restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

29. (New) The information reproducing apparatus as claimed in Claim 12, further comprising:

a determining part determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

a validating part validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

30. (New) The information reproducing apparatus as claimed in Claim 12, further

comprising:

a storing part temporarily storing information read from the information medium in a cache memory;

a pre-reading part pre-reading information if a space is available in the cache memory; and

a part causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

31. (New) The information reproducing apparatus as claimed in Claim 13, further comprising:

a monitoring part monitoring whether the read request is issued; and

a restarting part restarting measurement of the average transfer rate if the read request is not issued for a predetermined time in measurement of the average transfer rate.

32. (New) The information reproducing apparatus as claimed in Claim 13, further comprising:

a monitoring part monitoring a read address of the read request; and

a restarting part restarting measurement of the average transfer rate if the read address is arranged in a formation other than an increasing order.

33. (New) The information reproducing apparatus as claimed in Claim 13, further

comprising:

a determining part determining validity of the average transfer rate on the basis of average transfer rates obtained a number of times of measurement; and

a validating part validating the average transfer rate if the average transfer rates obtained a number of times of measurement are close to each other.

34. (New) The information reproducing apparatus as claimed in Claim 13, further comprising:

a storing part temporarily storing information read from the information medium in a cache memory;

a pre-reading part pre-reading information if a space is available in the cache memory; and

a part causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.

35. (New) The information reproducing apparatus as claimed in Claim 14, further comprising:

a storing part temporarily storing information read from the information medium in a cache memory;

a pre-reading part pre-reading information if a space is available in the cache memory; and

a part causing measurement of the average transfer rate to be initiated when the cache memory is full of data and the pre-reading of information is completed in a case where information is read from the information medium at a maximum rate.